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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.         | CONFIRMATION NO.       |
|---|-------------|----------------------|-----------------------------|------------------------|
| 10/798,290  | 03/12/2004  | Ian A. Marnoch       | 1686-2/AMK                  | 6456                   |
| 38735 7590 05/31/2007<br>DIMOCK STRATTON LLP<br>20 QUEEN STREET WEST SUITE 3202, BOX 102<br>TORONTO, ON M5H 3R3<br>CANADA |             |                      | EXAMINER<br>NGUYEN, HOANG M |                        |
|   |             |                      | ART UNIT<br>3748            | PAPER NUMBER           |
|   |             |                      | MAIL DATE<br>05/31/2007     | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/798,290

Applicant(s)

MARNOCH, IAN A.

Examiner

Hoang M. Nguyen

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All. b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 06/18/04.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_.

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12, 15-20, are rejected under 35 U.S.C. 102(b) as being anticipated by US 5548957 (Salemie).

Salemie discloses a power plant comprising many vessels A, B, C, a heating source 49 through pump 32, cold source through pump 30, each vessel having a heat exchanging coil 18a, b, c, with a plurality of valves 15, 17, for controlling the working fluid to drive a motor 10 which can be a rotary actuator or a piston-cylinder type (column 2, lines 42-45), the output is used to drive an electrical generator.

Regarding claim 3, note the each vessel has two pairs of valves at the inlet and outlet of the coil.

Regarding claims 4, 6, column 4, lines 60-68 to column 5, lines 1-15, clearly disclose the valves being electrically controlled by controller 42.

Claims 15-16, 18-20, are rejected under 35 U.S.C. 102(b) as being anticipated by US 3888084 (Hawkins).

Hawkins discloses a power plant comprising two vessels 21, 23, a heating source 11, cold source 14, each vessel having a heat exchanging coil 22, 24, with a plurality of valves 17, 27, for controlling the working fluid to drive a motor 31 which can be a rotary actuator, the output is used to drive an electrical generator.

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13-14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 5,548,957 (Salemie). Salemie discloses all the claimed subject matter as set forth above in the rejection of claim 1, but does not disclose the copper tubing or the specific fluid as claimed. However, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to select the specific copper tube or working fluid as claimed in Salemie for the purpose of achieving appropriate heat transfer rate.


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Purvis et al, Hemsath, Gray, Jr. et al, and Enander et al disclose power plants using a pair of vessels for driving output motors.

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Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Nguyen whose telephone number is (571) 272-4861. The examiner can normally be reached on Tuesday--Friday from 12:30 AM to 10:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on 571-272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



05/26/07

HOANG NGUYEN  
PRIMARY EXAMINER  
ART UNIT 3748

Hoang Minh Nguyen  
5/26/2007